DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BOG POND	Lake Area (ha): 40.02
Town: DANBURY	Maximum depth (m): 3.0
County: Merrimack	Mean depth (m): 0.6
River Basin: Merrimack	Volume (m ³): 241500
Latitude: 43°30' N	Relative depth: 0.4
Longitude: 71°51' W	Shore configuration: 2.72
Elevation (ft): 815	Areal water load (m/yr): 22.30
Shore length (m): 6100	Flushing rate (yr^{-1}) : 36.90
Watershed area (ha): 1757.7	P retention coeff.: 0.47
% watershed ponded: 0.2	Lake type: natural w/dam

BIOLOGICAL:	19 January 1988	28 August 1987
DOM. PHYTOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	PENNATE DIATOM SPP. 509
#2		DINOBRYON 15%
#3		CHRYSOSPHAERELLA 10%
PHYTOPLANKTON ABUNDANCE (cells/mL)		590.0
CHLOROPHYLL-A (µg/L)		5.48
DOM. ZOOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	NAUPLII LARVAE 87%
#2		CYCLOPOID COPEPOD 7%
#3	·	
ROTIFERS/LITER	8	22
MICROCRUS/ACEA/LITER	0	338
ZOOPLANKTON ABUNDANCE (#/L)	8	360
VASCULAR PLANT ABUNDANCE		Very abundant
SECCHI DISK TRANSPARENCY (m)		1.7
BOTTOM DISSOLVED OXYGEN (mg/L)	3.2	7.0
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None

CHEMICAL:	Lake: BOG POND Town: DANBURY			
	19 January 1988		28 August 1987	
DEPTH (m)	1.0	1.5	1.0	1.5
pH (units)	5.7	5.8	6.5	6.7
A.N.C. (Alkalinity)	6.0	6.5	13.7	10.5
NITRATE NITROGEN	0.06	0.09	< 0.05	< 0.05
TOTAL KJELDAHL NITROGEN	0.17	0.26		0.49
TOTAL PHOSPHORUS	0.008	0.008	0.036	0.011
CONDUCTIVITY (pmhos/cm)	36.9	36.6	34.3	34.2
APPARENT COLOR (cpu)	65	65	80	80
MAGNESIUM			0.66	
CALCIUM			0.1	
SODIUM			2.7	
POTASSIUM			0.20	
CHLORIDE	< 2	< 2	2	< 2
SULFATE	2	1	3	3
TN : TP	29	44		45
	T	1	1	

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1987

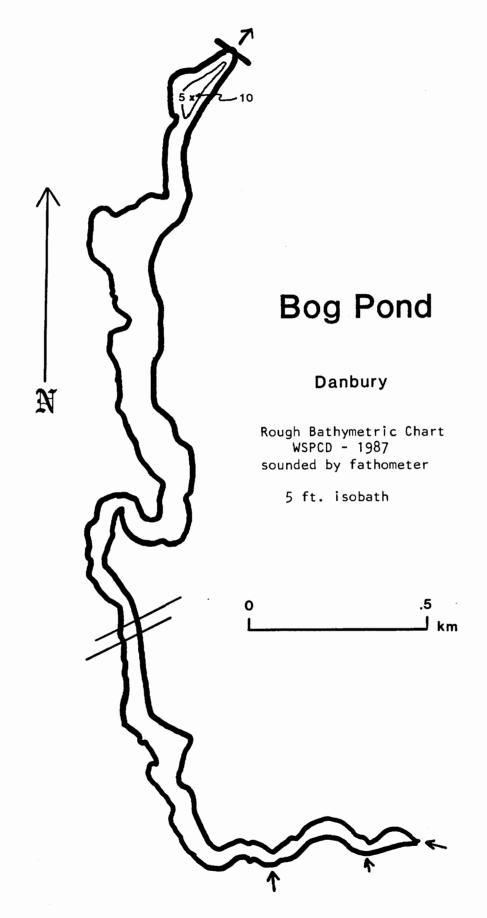
CALCITE SATURATION INDEX

_	D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
	**	3	4	1	8	Eutro.

4.7

COMMENTS:

- 1. Also called Danbury Bog.
- 2. This is not a pond. It is a wetland area with a narrow channel of partly open water in the northern half. The southern half had no open water channel and was not navigable.
- 3. The whole-water phytoplankton was dominated by greens (55%) and Cryptomonads (25%). Tiny green flagellates (45%) and Cryptomonas (25%) were the dominant genera.



FIELD DATA SHEET

LAKE: BOG POND TOWN: DANBURY DATE: 08/28/87 WEATHER: RAIN

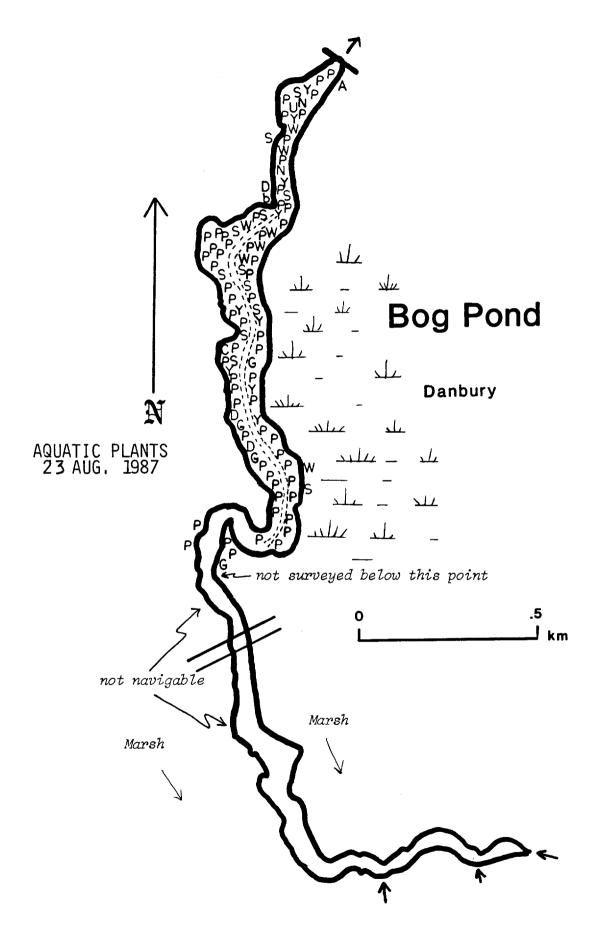
DEPTH (M)	TEMP (°C) 17.0	*DISSOLVED OXYGEN	OXYGEN SATURATION
	17.0	– 4	
0.1		7.4	76 %
1.0	17.0	7.4	76 %
1.5	17.0	7.0	72 %
1.8	17.0	7.0	72 %
	: 		

SECCHI DISK (m): 1.7 COMMENTS:

BOTTOM DEPTH (m): 1.8

TIME: 1124

*Dissolved oxygen values are in mg/L



AQUATIC PLANT SURVEY

LAKE: BOG POND TOWN: DANBURY DATE: 08/28/87 PLANT NAME Key ABUNDANCE **GENERIC** COMMON Pontederia cordata Pickerelweed Very abundant Α Sagittaria Arrowhead Scattered Υ Nuphar Yellow water lily Common S Sparganium Bur reed Abundant Ν Nymphaea White water lily Scattered U Utricularia Bladderwort Common W Potamogeton Pondweed Abundant Decodon verticillatus Swamp loosestrife Scattered Ь Scirpus validus Softstem bulrush Scattered G Gramineae Grass family Common С Cephalanthus occidentalis Buttonbush Scattered

OVERALL ABUNDANCE: Very abundant

GENERAL OBSERVATIONS:

- 1. This is a scenic wetland area. The marsh extended well beyond the pond margin portrayed on the adjacent map.
- 2. A navigable channel was present only in the northern half of the marsh.